

What is claimed is:

1. An oxygen scavenging composition for enhancing shelf-life of a packaged product, said composition comprising an enzyme system, a suitable energy source for said enzyme system, and
5 a buffering agent, said composition being suitable for direct application to the product of the packaged product with no consumer detectable change in product character.
2. The oxygen scavenging composition of claim 1 wherein said
10 enzyme system comprises an oxidoreductase enzyme.
3. The oxygen scavenging composition of claim 2 wherein said enzyme system further comprises catalase.
- 15 4. The oxygen scavenging composition of claim 3 wherein said oxidoreductase enzyme comprises glucose oxidase.
5. The oxygen scavenging composition of claim 3 wherein said oxidoreductase enzyme comprises hexose oxidase.
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6. The oxygen scavenging composition of claim 3 wherein said suitable energy source comprises a reducing sugar.
7. The oxygen scavenging composition of claim 6 wherein said

reducing sugar is selected from the group consisting of glucose, galactose, fructose, xylose, arabinose, mannose, rhamnose, maltose, isomaltose, lactose, and cellobiose.

5 8. The oxygen scavenging composition of claim 7 wherein said suitable energy source comprises a glucose source.

9. The oxygen scavenging composition of claim 8 wherein said glucose source comprises dextrose.

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10. The oxygen scavenging composition of claim 9 wherein said oxidoreductase enzyme comprises glucose oxidase.

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11. The oxygen scavenging composition of claim 9 wherein said oxidoreductase enzyme comprises hexose oxidase.

12. The oxygen scavenging composition of claim 10 wherein said glucose oxidase is present in an amount of about 1 and 100 activity units (U) per gram.

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13. The oxygen scavenging composition of claim 7 wherein said catalase is present in an amount of about 1 and 300 activity units (U) per gram.

14. The oxygen scavenging composition of claim 13 wherein said glucose source is present in an amount of about 20 to 99 weight percent.

5 15. The oxygen scavenging composition of claim 14 wherein said buffer is present in an amount of about 1 to 80 weight percent of said composition.

10 16. The oxygen scavenging composition of claim 15 wherein said buffer comprises sodium bicarbonate.

15 17. The oxygen scavenging composition of claim 14 wherein a molar ratio of glucose to buffering agent is in the range of about 0.5 to 1.

18. The oxygen scavenging composition of claim 14 wherein a molar ratio of glucose to buffering agent is in the range of about 10 to 1.

20 19. The oxygen scavenging composition of claim 18 wherein said molar ratio of glucose to buffering agent is in the range of about 2 to 1.

20. The oxygen scavenging composition of claim 6 wherein said

composition is contained in a water permeable enclosure.

21. The oxygen scavenging composition of claim 20 wherein said enclosure is a bag.

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22. The oxygen scavenging composition of claim 20 wherein said enclosure is a resealable bag.

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23. The oxygen scavenging composition of claim 20 wherein said enclosure is a sachet.

24. The oxygen scavenging composition of claim 6 wherein said composition is contained in laminate product receiving structure.

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25. The oxygen scavenging composition of claim 6 wherein said composition is embodied in a three dimensional form.